

AN IMPROVED METHOD OF MAKING ACCURATELY PROPORTIONED DRAWINGS

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A recent article by Moore (Coleopt. Bull. 28:26. 1974) on producing outline drawings, elicited enough interest that it seems worthwhile to document a simplification or refinement of that method.

Scientific illustrations continue to be one of the best means of describing minute organisms. Unfortunately, the majority of people who need accurate drawings to impart their research findings possess little artistic ability. Further, a professional scientific illustrator's services may be too costly or not available at the time the drawing is desired. Various drawing techniques have been used in order to achieve the highest degree of precision with a minimum of drawing ability and time investment. Among the more accurate methods of producing drawings is one described by D. M. Anderson (Bio Science. 16:758-759. 1966). Anderson's technique involved the use of a model 900 Polaroid Land Camera which accepts black and white transparency film. Once the photograph is taken the transparency is cut to fit a 2 × 2 inch glass super slide. It is then projected with the aid of a slide projector onto a sheet of drawing paper. After careful focusing, the image is then traced.

The procedure followed by Moore makes use of the model 350 Polaroid Land Camera adapted to the ocular of either a dissecting or compound microscope for obtaining black and white prints. The prints are then enlarged to a suitable size from which a tracing is made. The tracing is then reproduced on drawing paper as an ultimate outline drawing, with the aid of a well-illuminated tracing table.

Our improved method employs the use of an opaque projector. It provides a more efficient means of getting from the polaroid print to the finished inked drawing. Black and white polaroid prints are taken in the same manner as described by Moore. As soon as the print is coated and dry it is ready to be projected. For this we use an American Optical Opaque model 3525. Opaque projection provides a sharp image with good definition over a wide range of enlargement sizes as determined by the projection distance. The unit we employ is designed for wall (horizontal) projection. However, desk or table (vertical) projection would further facilitate drawing. Horizontal tracing is accomplished by taping drawing paper to the wall after centering it on the projected image. Tracing is done in pencil, later to be inked. The degree of detail copied is left up to the individual within the limits of the quality of the print. Further details and final finish are added later when the drawing is compared with the specimen as seen through the microscope.

